

In the Specification

Please amend the specification according to the following:

Description of the Prior Art

Please delete in the paragraphs in their entirety from page 3, line 28 to page 7, line 11. Applicant has submitted a corresponding information disclosure statement in the present response.

Abstract of the Disclosure

Please delete the entire Abstract, paragraphs 1 and 2 on page 35, lines 1-20. Please add the following new Abstract paragraph at line 1, page 35 in place of the deleted Abstract:

A system for tomographic sounding using infrared radiation, said system comprising a plurality of gas correlation cameras, each of said cameras comprising at least two gas correlation cells, one of said cells filled with a first gas capable of absorbing infrared radiation at one infrared band and another of said cells filled with a second first gas capable of absorbing infrared radiation at another infrared band, and a camera with imaging optics for determining both the spectral and energy content of said first infrared band and the spectral and energy content of said second infrared band.